

EFFECTS OF FINANCIAL LITERACY ON SUSTAINABLE ENTREPRENEURSHIP AMONG THE YOUTHS IN BOMET COUNTY, KENYA

ABSTRACT

There is growing unemployment in Kenya and the youths are bearing the blunt of this worrying trend, despite the numerous interventions by both state and non-state actors in encouraging the youths to venture into entrepreneurship. This study sought to establish the role of Financial Literacy on the development of sustainable business ideas and innovations. The study was conceptualized with the intention of investigating the role that financial literacy plays in influencing sustainable entrepreneurship among the youthful entrepreneurs. The population of interests was the business enterprises run by youthful entrepreneurs across various sectors of business in Bomet Municipality located in Bomet County; Kenya. The study used primary data with a sample size of 473 respondents which achieved 100% response rate, with male response of 53% and 47% female. The measures of central tendency, measures of dispersion and Regression model were used to find out the relationship and correlation of the variables. The study established that there was a significant relationship between gender and sustainable entrepreneurship, further found, that financial literacy had weak a positive significant relationship with business sustainability. The study recommends that emphasis should be placed on financial literacy as a significant determinant of sustainable businesses among the youth entrepreneurs and that training as tool to provide more knowledge on entrepreneurial skills to be factored in the trade policy.

Key words: *Financial literacy, Sustainable Entrepreneurship, Youths, Bomet Municipality, Kenya*

Introduction

World over, entrepreneurship is recognized as a fundamental engine for economic growth. It is on this basis that both the developed and the developing economies have laid a lot of emphasis on providing conducive environments for entrepreneurs to thrive. For example, The Kenya Vision 2030; an economic blueprint that envisions a globally competitive and prosperous country recognizes entrepreneurship as being essential ingredient in fueling innovation and economic growth (Government of Kenya, 2008).

Moreover, entrepreneurship alone without basic financial literacy skills may be rendered ineffective. Atkinson and Messy (2012) define “financial literacy as a combination of being aware of, knowledge, skills, behavior that is necessary for a suitable financial decision and to reach its own financial wealth”. Financial literate individuals are by Kempson, Collard and Moore (2006) individuals, who have mathematical literacy, can effectively manage with money, and know how to manage a credit and debts. They are able to evaluate the need for insurance and protection. They know how to evaluate different kinds of risks and repayments that are connected to different possibilities of saving money and deposits. They also understand wide ethical, social, political and environmental dimensions of finances.

“Business researchers examining and addressing the concerns about business as usual have adopted the terms sustainability and sustainable development as an overarching concept designed to describe and encompass a broad range of practices. Sustainable entrepreneurship refers to the discovery, creation, and exploitation of entrepreneurial opportunities that contribute to sustainability by generating social and environmental gains for others in society” (Hockerts and Wüstenhagen, 2010; Pacheco et al., 2010; Shepherd and Patzelt, 2011). According to Cohen and Winn (2007) “the concept of opportunity creation is central in the literature defining sustainable entrepreneurship and entrepreneurship in general. Additionally, they relate opportunity identification (for sustainable entrepreneurship) to market imperfections namely to the following: (1) firms are not perfectly efficient; (2) externalities exist, (3) pricing mechanisms work imperfectly, and (4) information is not perfectly distributed. They argue that entrepreneurs who spot such market imperfection have greater potentials to be successful. Common ground between entrepreneurship and sustainability is the concept of longevity, assuring long lasting goods, values or services: preserving current resources for future generations (sustainability) and developing unique solutions for the long run (entrepreneurship)”.

“Both sustainability and entrepreneurship require innovation, which, applied to both fields, simply a creative new combination of existing resources” (Nicholls-Nixon *et. al.*, 2000). Pacheco *et. al.*, (2010) define sustainable entrepreneurship as the “discovery, creation, evaluation, and exploitation of opportunities to create future goods and services consistent with the sustainable development goals”, sustainable entrepreneurship strives to create value that is beneficial for society through opportunity creation, and development in an uncertain environment. This implies risk-taking abilities, innovative attitude and alertness together with determined ethical concerns.

“Youth are valued possessions of the nation. Without them there can be no reconstruction and development programme. Without them there is no future. Their needs are immense and urgent”. – Former President of South Africa, Nelson Mandela (May, 1999). The above statement underscores the importance of the youth in any nation.

“It is widely accepted that most consumers lack the financial literacy necessary to make important financial decisions in their own best interests” (Braunstein and Welch, 2002). “Experts also generally agree that financial knowledge appears to be directly correlated with self-beneficial financial behaviour” (Hilgert *et. al.*, 2003).

“Clearly, the importance of financial literacy cannot be underestimated, because a financial illiterate person may be unable to budget appropriately to meet expenditures, be unable to identify financial products or services that meet his/her needs, be unsure how to get and assess independent financial advice, and finally are more likely to fall victims to abusive and exploitative practices and scams” (Alessie *et. al.*, 2011). “A number of writers have noted that improving financial literacy can benefit all levels of the economy and will support the financial services sector; social and economic exclusion will also be reduced; spending power, innovation and competitiveness will increase, and loan defaults will decrease” (Norris *et. al.*, 2005).

Statement of the Problem

Kenya is a country of the youth according to the 2019 Population and Census results (Kenya National Bureau of Statistics, 2019) which shows that 75% of the 47.6 million population is under the age of 35. Approximately 800,000 young Kenyans enter the labour market every year and youth unemployment is estimated to be as high as 35%, compared to the overall national unemployment rate of 10% (KNBS). Furthermore, 80% of unemployed Kenyans are below 35 years old (KNBS). The rate of unemployment in Kenya is sky rocketing with 70% of the unemployed nationally being the youth. Kenya has to create at least 900,000 jobs annually between 2015 and 2025 to absorb the high number of youths joining the job market, according to the World Bank report (2012). The report further says that about nine million individuals are expected to enter the labour force in a decade between 2015 and 2025.

However, entrepreneurship holds a prominent place in the efforts to generate jobs. This is especially the case in Kenya where there are vast opportunities for business ventures; Agriculture, real estate, technology, manufacturing, processing among others. Moreover, going the value addition way in these sectors will engender millions of jobs while boosting the national coffers.

Admittedly entrepreneurship has failed to realize the expected results of taming the rampant unemployment. Despite numerous efforts to make the business environment conducive for startups and existing businesses to thrive, most of the unemployed graduates do not seem to have grabbed opportunities to start businesses and sustain them despite their level of financial literacy. The worrying trend has seen most young people and even those educated up to higher Level of education endeavor to look for unavailable jobs, instead of facing the risk of starting their own business ventures which would create jobs for them and for others. This brings to question the role financial literacy plays in the development and sustainability of business ventures specifically among the youthful entrepreneurs. This study therefore proposes to investigate the effects of Financial Literacy on sustainable entrepreneurship among the youths within Bomet County, Kenya.

LITERATURE REVIEW

“Entrepreneurship has long been perceived a little more than an applied trade as opposed to an academic area of study. For a long time, there was no research to be accomplished because it was thought that those who could not attend college would simply practice the concept of new business start-up” (Kuratko 2009). Due to SMEs critical role in economic growth, many research studies have now been carried out to deepen understanding of entrepreneurship.

Financial literacy theory

It argues that the behavior of people with a high level of financial literacy might depend on the prevalence of the two thinking styles according to dual-process theories: intuition and cognition. Dual process theories (Evans 2008) embrace the idea that decisions can be driven by both intuitive and cognitive processes. “Dual-process theories have been studied and applied to many different fields, e.g., reasoning and social cognition” (Evans 2008). Financial literacy remains an

interesting issue in both developed and developing economies and has elicited much interest in the recent past with the rapid change in the finance landscape. According to this theory, Gallery, Newton and Palm (2011) argued that “framework financial knowledge is a form of investment in human capital, and many empirical surveys establish that people need to know much more to become informed. The authors show how financial literacy shapes economic outcomes. They concluded with thoughts on research needs to better inform theoretical and empirical models as well as public policy”.

Financial literacy theory argues that the behavior of people with a high level of financial literacy might depend on the prevalence of the two thinking styles according to dual-process theories: Intuition and Cognition. Dual-process theories (Idowu 2010) embrace the idea that decisions can be driven by both intuitive and cognitive processes had been studied and applied to many different fields, like reasoning and social cognition. Atkinson and Messy (2005) define “financial literacy as the combination of investors understanding of financial products and concepts and their ability and confidence to appreciate financial risks and opportunities, to make informed choices, to know where to go for assistance, and to take other effective actions to improve their financial well-being”. “Financial literacy helps in empowering and educating investors so that they are knowledgeable about finance in a way that is relevant to their business and enables them to use this knowledge to evaluate products and make informed decisions. It is widely expected that greater financial knowledge would help overcome recent difficulties in advanced credit markets” (Lusardi and Oliver, 2006)

Adina (2012) conducted “a study on Defining and Measuring Financial Literacy. New Evidence from Romanian’ students of the Master in Finance. Financial literacy was accomplished through reviewing the literature, finding the definition of these two concepts, “financial” and “literacy”, for a better understanding of meanings of these two concepts. Across-sectional survey of 200 students from the Master in Finance, at several Faculties of Economics and Business Administration from Romania. Convenience sampling was used. The results that were obtained show that the participants correctly answered at 74.79% of questions. The study results indicate that male students have a higher level of literacy related to personal finance than female students. Also, the survey shows that 75% of economist students from Romania have a medium to high level of financial literacy, but only 48.8% have a high level of financial literacy”.

Dumitru et al (2020) did “a study on Financial Literacy Level of Young Entrepreneurs in the Private University. This study aimed to illustrate how high the level of financial literacy is amongst young entrepreneurs descriptively. Young entrepreneurs are students who have a business project during their studies at the university. The research methodology used in the study was the survey method by sending out questionnaires to respondents. There was a total of 183 respondents. The methodology used was descriptive statistics. The study findings indicated that the financial literacy of young entrepreneurs is considered in the low category. Young entrepreneurs better understand savings and loans than understanding insurance”.

Moreover, Emmanuel K (2015) assessed “the level of financial literacy and impact on youth entrepreneurship in South Africa. They used both desk research and questionnaire, complemented by interview to assess the level of financial literacy among youth entrepreneurs in the Vhembe District of the Limpopo Province, South Africa. The study revealed that financial literacy among youth entrepreneurs in the Vhembe District appears to be above average and contributes meaningfully to their entrepreneurship skills. The study suggested that further research is needed to verify in specific and practical terms, the level and impact of financial literacy on youth entrepreneurs in the Vhembe District. The study recommended that Education and training at both high school and tertiary levels with emphasis on financial literacy and entrepreneurial skills may have significant implications for small-, micro-, and medium-sized enterprise development and growth for the youth entrepreneur in general in South Africa”.

On their part, Cude et al. (2006) examined “US college students’ overall financial management practices using quantitative and qualitative data from a multi-state research project. The study investigated how college students acquire financial knowledge and behaviours and the factors that place some students at greater financial risk than others. The findings show that parents play a key role in their children’s financial management practices. The authors concluded that the results provide important insight into financial education opportunities for students, parents, college administrators, and financial professionals and educators”.

Haiyang and Volpe (2002) conducted “a survey of financial literacy among college students in the USA. Their findings show that women generally have less knowledge about personal finance topics. The same study revealed that **gender differences remain statistically significant after controlling for other factors such as participants’ majors, class rank, work experience, and age.** The authors, however, found that education and experience can have a significant impact on the financial literacy of both men and women. They observed further that women generally have less enthusiasm and the willingness to learn about personal finance topics than men do”.

Oesifuah (2010) investigated “the level of financial literacy and its determinants for youth entrepreneurs. The main variables of financial literacy were Financial knowledge, financial attitude, financial behaviour, mathematical and computer literacy. They had a sample size of 39 and found that youth entrepreneurs had above average financial literacy, Good knowledge of interest rates, Value Added Tax(VAT) , insolvency and very less knowledge about stock exchange” .

Gupta & Kaur (2014) assessed “the financial literacy of micro-entrepreneurs of Kangra district in Himachal Pradesh. They sampled 100 micro-entrepreneurs. Their study variables were Record keeping, awareness of financial institutions, savings, investments and loan policies. The study outcomes were -Low financial **literacy among entrepreneurs, evident from deficient record keeping practices, poor cash management,** inadequate savings and limited awareness about financial products and institutions”.

Jianmu Y & Kulathunga (2019) constructed “an integrated model to examine the impact of financial literacy, access to finance and financial risk attitude on SMEs’ sustainability. The sample included 291 chief financial officers (CFOs) of SMEs in Sri Lanka. The output of

structural equation modelling revealed direct positive effects of financial literacy, access to finance and financial risk attitude on sustainability. Financial literacy also emerged as a predictor of access to finance and financial risk attitude. Moreover, access to finance and financial risk attitude were found to be partial mediators of the relationship between financial literacy and SMEs' sustainability".

3.0 METHODOLOGY

3.1 Area of study

Bomet municipality falls within the Rift valley floor in the south rift region of Kenya. The Municipality hosts Bomet town which is the administrative headquarters of Bomet County. Bomet Municipality receives rainfall through out the year and had two rainy seasons; march to June and August to October. The mean annual temperature is 18⁰c. According to the Kenya National Bureau of Statistics (2019), the Municipality has a population of 121,856 persons.

3.2 Target Population

This study targeted all the youth entrepreneurs registered by County Government of Bomet, who were engaged in different business enterprises within Bomet Municipality and with a Business Permit (registered businesses) which is a mandatory requirement for a person intending to start a business within the County. The registered businesses owned by youth entrepreneurs within Bomet Municipality by the year ending 2019 were One thousand five hundred and sixty-eight (1568).

3.3 Sampling method

Purposive sampling was used to identify youth owned enterprises operating within Bomet Town. Only the youthful entrepreneurs aged between 18 to 35 years participated in the study. The Study adopted snowball sampling method in the identification of the study participants.

3.4 Sample Size Determination

Using 99% confidence level, a margin error of 0.05 and a population size of 1568, the sample size for this survey comprised 467 respondents derived from a population of 1568 registered youth entrepreneurs. This was achieved using the Cochran's formula for calculating sample size when population size is finite.

3.5 Data Collection and Analysis

Data was collected using questionnaires that targeted the sampled respondents. The questionnaire was digitized in KoBoCollect and administered through mobile data collection by selected and trained field enumerators. Filled in Questionnaires were transmitted online to a central server at Bomet University College. Field enumerators were required to visit business premises, market centres, juakali enterprises and administer questionnaires to collect information being sought. Data was collected within three (3) days. Data was analysed using both descriptive and inferential statistics

3.5.1 Model Specification

For inferential statistics, multivariate regression was used. The regression model was specified as in equation 3.1 below:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + \beta_7 X_{7i} + U_i \quad \text{.....3.1}$$

Where Y_i = Sustainable Entrepreneurship

X_{ji} = Financial Literacy ($j=1,2,\dots,7$; $i= 1,2,3,\dots,473$). Hence:

X_{1i} = Record Keeping knowledge

X_{2i} = Knowledge on Data based investment

X_{3i} = Knowledge on sources of finance

X_{4i} = Knowledge on forecasting profitability

X_{5i} = Knowledge on monitoring changes

X_{6i} = Knowledge on how to raise funds

X_{7i} = Knowledge on accounting book keeping

$\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$ and β_7 are parameters to be estimated.

U_i is the error term assumed to be normally distributed with mean of zero and constant variance

4.0 RESULTS AND DISCUSSIONS

Reliability of the Questionnaire

Cronbach Alpha Reliability test was applied to test the reliability of this questionnaire. According to Connelly (2008), extant literature suggests that a pilot study sample should be at least 10% of the sample of parent study. A minimum sample size of 46 respondents was therefore selected for the pilot study. A pilot study for this research was conducted at Sotik area, giving an output of 50 responses. The pilot study output was run through the Cronbach's alpha coefficient to determine its reliability and internal consistency. The following results were obtained based on the various sections.

Table 1. Reliability test results

Constructs	Number of Items	Cronbach's alpha
Financial Literacy	7	.877
Sustainable Entrepreneurship	9	.904

From tabulated results in Table 1, alpha coefficient for all the variables of Financial Literacy and Sustainable Entrepreneurship ce were in the range 0.702 – 0.904. Hence are above the benchmark of 0.7 suggested by Sekeran (2000), benchmark of $\alpha = 0.7$. and thus the scales were reliable for measuring the variables.

Validity of the Questionnaire

To ensure validity, the questionnaire was subjected to a team of research experts for their input. Moreover, the questionnaires were based on the relevant reviewed literature and adoption of previously validated items.

4.1 Descriptive Results on Gender and Sustainable Entrepreneurship

The data was disaggregated into male respondents and female respondents sets. The eight dimensions used to measure sustainable entrepreneurship were; setting long term financial goals for the business and striving to achieve them, influencing the state of the business finances in the future with the day to day behavior, readiness to persevere if business success does not materialize immediately, maintaining good relationship with suppliers and customers, regularly reviewing the product range to be in line with what customers want, readiness to exploit opportunities when they arise, closely monitoring competitors, and viewing risk as something positive.

Table 2: Descriptive Results for Gender and Sustainable Entrepreneurship

	LONG TERM GOALS		BEHAVIOR		PERSEVERING		GOOD RELATIONS		REGULAR REVIEW		EXPLOIT OPPORTUNITIES		MONITOR COMPETITORS		VIEW OF RISK	
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M
NValid	203	270	203	270	203	270	203	270	203	270	203	270	203	270	203	270
Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mean	4.14	4.8	4.26	4.16	4.31	4.27	4.64	4.57	4.18	4.27	4.32	4.36	3.81	3.86	3.90	3.96
Median	4.00	4.00	4.00	4.00	4.00	4.00	5.00	5.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Mode	4	4	4	4	5	5	5	5	4	4	4	4	5	5	5	5
Std. Deviation	.951	.960	.602	.688	.847	.900	.511	.598	.759	.765	.752	.705	1.285	1.239	1.239	1.156
Skewness	-1.648	-1.512	-.319	-.901	-1.419	-1.402	-.924	-1.886	-.868	-1.055	-1.522	-1.269	-.908	-.948	-1.136	-1.192
Std. Error of Skewness	.171	.148	.171	.148	.171	.148	.171	.148	.171	.148	.171	1.48	.171	.148	.171	.148
Kurtosis	3.096	2.325	.169	2.184	2.453	1.940	-.411	7.587	1.187	1.401	3.854	3.095	-.361	-.220	.392	.710
Std. Error of Kurtosis	.340	.295	.340	.295	.340	.295	.340	.295	.340	.295	.340	.295	.340	.295	.340	.295

As shown in the table above, the total number of respondents was 473. The total male respondents were 270 whereas the female respondents were 203 amounting to 57 % and 43% respectively. The mean responses of sustainability were computed for the two gender and comparisons made.

The results on table 2 Shows that the mean responses on setting long-term financial goals were higher for the youthful male entrepreneurs (mean=4.8) with the female entrepreneurs posting a

mean of 4.14. Regarding the day today business behavior, the female entrepreneurs were keener posting a mean of 4.26 compared to 4.18 for the male youthful entrepreneurs. On the readiness to

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persevere, the female entrepreneurs recorded a higher mean of 4.31 compared to mean of 4.27 for the male youthful entrepreneurs. Furthermore, the female entrepreneurs were more committed to building good relations with customers and suppliers (mean= 4.64) unlike male entrepreneurs who posted a mean of 4.57.

The study further sought to gauge how well entrepreneurs from both genders carry out regular reviews of their businesses to align them with customer requirements. The results showed that male entrepreneur's carryout regular reviews(mean=4.27) more than their female counterparts (mean = 4.18). Additionally, the readiness to pursue and exploit new opportunities was higher for male entrepreneurs (mean=4.36) compared to the female entrepreneurs who registered a mean of 4.32 though the difference was marginal. These results were also consistent with those of monitoring competitors since the male entrepreneurs recorded a much higher mean (mean= 3.86) unlike the female entrepreneurs (mean= 3.81). Notably, the same trend was witnessed when the study sought to establish how the two gender view business risk. The male entrepreneurs viewed risk more positively (mean= 3.96) unlike the female entrepreneurs whose mean of 3.90 reflects a more cautious approach to taking business risk.

Generally both gender regarded highly the need to maintain good relations with suppliers and customers (female mean=4.64, male mean= 4.57). This implies that entrepreneurs highly value customer relations as a prerequisite for sustaining their businesses.

The standard deviation for both the female and male gender was lowest on the indicator on maintaining good relations with customers and suppliers ($\sigma = 0.511$ and $.598$ respectively). This means that there was consistency on the responses of the youth entrepreneurs from the two gender on the indicator. This implies that majority of the responses were less dispersed around the mean response. On

the other hand however, the standard deviation for the male respondents was highest on the indicator that measures monitoring competitors ($\sigma = 1.239$), whereas for the female entrepreneurs the standard deviation was highest on the indicator that measure their view of risk ($\sigma = 1.239$). This means that the individual responses for the two gender were highly scattered about the mean for the two indicators of monitoring competition and view of risk for the male and female respondents respectively. This implies that majority of the responses of the youth entrepreneurs were far from the mean response.

The coefficients of skewness for all the eight indicators were negative. This means that majority of the responses obtained from the sampled youth entrepreneurs from Bomet County agreed and strongly agreed that they embrace practices that have the potential to ensure the sustainability of their businesses.

The findings that the mean responses on setting long-term financial goals were higher for the youthful male entrepreneurs compared to the female entrepreneurs supports the findings by Adina (2012) and Haiyang and Volpe (2002)

4.2 Level of Literacy among Youth Entrepreneurs

The study determined the level of financial literacy among youth entrepreneurs in Bomet County. To measure financial literacy, the study used the following seven indicators; keep secure data and information about the business, make investment on the basis of the financial data of the business, compare the cost of different sources of finance for the business, forecast the profitability of the business regularly, follow changes in economic factors to adjust the course of business operations, knowledge on how to raise funds if business needs them, and use of book-keeping to monitor the financial position of the business.

From the study it was clear that on average, most of the youth entrepreneurs in Bomet County agreed that they; keep secure data and information about the business, make investment decisions on the basis of financial data of the business, compare the cost of different sources of finance for their businesses, forecast the profitability of the business regularly, follow changes in economic factors to adjust the course of business operations, and also have knowledge on how to raise funds if their businesses needs them(mean= 3.79, 3.55, 3.51, 3.95, 3.86, and 4.00 respectively). Contrary, most of the sampled youth entrepreneurs were indifference that they use book keeping to monitor the financial position of the business(mean=3.43).

4.4 The Effect of Financial Literacy on the Development of Sustainable Businesses

The study sought to establish the effect of financial literacy on the development of sustainable businesses.

Table 3. Collinearity Diagnostics^a

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions							
				(Constant)	RECORDKEEP	DATABEST	SOURCEFIN	FORECASTPROFIT	MONITORINGCHANGES	RAISEFUNDS	BOOKKEEPING
1	1	7.530	1.000	.00	.00	.00	.00	.00	.00	.00	.00
	2	.130	7.624	.01	.03	.01	.04		.04	.01	.58
	3	.090	9.122	.01	.07	.14	.05		.06	.01	.18
	4	.078	9.848	.00	.19	.07	.11		.00	.02	.18

5	.061	11.072	.00	.00	.02	.11	.53	.39	.02	.02
6	.052	12.040	.00	.01	.00	.09	.02	.24	.73	.01
7	.040	13.710	.02	.62	.72	.02	.05	.00	.01	.02
8	.019	19.822	.97	.08	.03	.03	.14	.26	.20	.00

a. Dependent Variable: SUSENT

Table 4. Residuals Statistics^a

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.5118	4.7301	4.1998	.20077	473
Residual	-1.16301	.91069	.00000	.35682	473
Std. Predicted Value	-3.427	2.641	.000	1.000	473
Std. Residual	-3.235	2.533	.000	.993	473

a. Dependent Variable: SUSENT

4.5.3 Multicollinearity Diagnostics

Collinearity means that two or more of the independent/explanatory variables in a regression have a linear relationship. This causes a problem in the interpretation of the regression results. First, an examination of the correlation matrix of the independent variables was done. The presence of high correlations in the region of $r=0.9$ and above is an indication of substantial collinearity.

Secondly, collinearity could be due to the combination of two or more other independent variables. Multicollinearity was assessed using Variance Inflation Factors (VIF). A threshold of Variance inflation factor of 10 is suggested Kleinbaum *et al.*,(1988). The variance inflation factor values for Financial Literacy on the Development of Sustainable Businesses are in the range of 1.04–1.71 and are less than the set threshold which indicate that multicollinearity was not an issue. The results are presented in Table 5.

Table 5. Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics		
	B	Std. Error	Beta			Tolerance	VIF	
1	(Constant)	3.240	.107		30.361	.000		
	RECORDKEEP	.104	.017	.313	6.107	.000	.622	1.607
	DATABSDINVST	.018	.018	.052	.982	.327	.585	1.711
	SOURCEFIN	-.044	.015	-.126	-2.882	.004	.854	1.171
	FORECASTPROFT	.035	.015	.097	2.349	.019	.958	1.044
	MONITCHANG	.111	.017	.271	6.571	.000	.958	1.044
	RAISEFUND	.069	.017	.173	4.022	.000	.885	1.129

BOOKKEEP	-.055	.013	-.195	-4.365	.000	.817	1.223
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a. Dependent Variable: SUSENT

The results of the model showed a R^2 of 0.24 as shown in table 6. To determine the tabulated χ^2 we use $n \cdot R^2$ getting $473 \times 0.24 = 113.52$. The 5 % critical χ^2 value for 9 degrees of freedom is 16.919 and it was concluded that null hypothesis was rejected and that the disturbances are significantly different and therefore no heteroscedasticity and specification bias.

Test of independence of the error terms was done using Durbin-Watson test. The test was used to test for presence of serial correlation among the residuals. This assumption of independence of errors requires that the residuals or errors in prediction do not follow a particular pattern from case to case. The value of Durbin-Watson test statistic ranges from 0 to 4 as suggested by Hair *et al.*, (2010) the residuals are not correlated if the Durbin-Watson statistic is approximately 2 and the acceptable range is 1.5-2.50. The Durbin-Watson statistic for the estimated models was 2 the residuals are not correlated.

Table 6. Model Summary^b

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate	Durbin-Watson
1	.490 ^a	.240	.229	.35949	2.047

a. Predictors: (Constant), BOOKKEEP, FORECASTPROFT, MONITCHANG, SOURCEFIN, RAISEFUND, RECORDKEEP, DATABSDINVST

b. Dependent Variable: SUSENT

5.1 FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Based on objective four, the study revealed that there was a weak positive significant relationship between financial literacy and sustainable businesses among the youth entrepreneurs in Bomet County. Moreover, it was revealed that a unit standard deviation increase in Financial Literacy among the youth entrepreneurs in Bomet County would lead to a significant increase in the sustainability of their business enterprises.

Based on objective five, the study established that financial literacy explained business innovation. The study further revealed that the unit standard deviation increase in financial literacy skills would significantly lead to an increase in business innovation.

5.2 Conclusions

Based on the findings of Objective one, the study concluded that there exists a gender-specific relationship with sustainable entrepreneurship. In relation to objective two, the study concluded that the level of financial literacy among youth entrepreneurs in Bomet County is above average. In reference to objective three, the study concluded that the motivating factors driving youths into entrepreneurship include; financial stability, to supplement their income, as a passion and to provide products/services to the community. In respect to objective four, the study concluded that financial literacy had weak positive significant relationship with sustainable businesses among the youth entrepreneurs in Bomet County. Finally, with regards to objective five, the study concluded that financial literacy explained business innovation.

5.3 Recommendations

Based on the conclusion of objective four, the study recommends that emphasis should be placed on financial literacy as a significant determinant of sustainable businesses among the youth entrepreneurs in Bomet County.

5.4 Limitations and Future Research

There are several potential limitations of this study which therefore means that the generalizations of the findings should be done with caution. These limitations along with the study findings also suggest possible directions for future studies. The study evaluated financial literacy using a quantitative approach and this may have limited the level of understanding of such a rich construct. Since financial literacy is basically about behavior, future studies may consider using a qualitative approach so as to bring out many underlying facets of the construct that may have been omitted in the quantitative approach.

This study established that there is a relationship between Gender and Sustainable Entrepreneurship, and also between financial literacy and sustainable entrepreneurship. These results clearly point to the fact that gender is a predictor of numerous business-related behaviors. Since this present study didn't delve into the relationship between gender and financial literacy, this may present a gap for possible future studies. Moreover, this study limited itself to the youthful entrepreneurs between the age of 18 and 35. It may therefore be plausible to consider undertaking a comparative study with an age group higher than 35 years.

Lastly it is good to mention that this study was carried out in a third world where most enterprises are micro and small, and where the culture and operating environment is markedly different from the developed world. It would therefore be interesting to carry out a similar study in the developed world and probably draw parallels with the results of a developing world.

REFERENCES

- Alessie, R. J., Van Rooij, M., and Lusardi, A. (2011). *Financial literacy, retirement preparation and pension expectations in the Netherlands* (No. w17109). National Bureau of Economic Research. 1050 Massachusetts Avenue Cambridge, MA 02138. <http://www.nber.org/papers/w17109>.
- Atkinson, A. and F. Messy (2012), "Measuring Financial Literacy: Results of the OECD / International Network on Financial Education (INFE) Pilot Study", *OECD Working Papers on Finance, Insurance and Private Pensions*, No. 15, OECD Publishing. <http://dx.doi.org/10.1787/5k9csfs90fr4-en>.
- Atkinson A., and Messy F. (2011). [Assessing Financial Literacy in 12 Countries: An OECD Pilot Exercise](#) Netspar Discussion Paper No. 01/2011-014 26 Pages · Posted: 19 Apr 2011
- Braunstein, S., and Welch C. (2002). *Financial literacy: an overview of practice, research, and policy*. <http://www.federalreserve.gov/pubs/bulletin/2002/1102lead.pdf>.
- Chen, Haiyang & Volpe, Ronald. (2002). *Gender Differences in Personal Financial Literacy Among College Students*. *Financial Services Review*. 11. 289-307. https://www.researchgate.net/publication/285358406_Gender_Differences_in_Personal_Financial_Literacy_Among_College_Students.
- Cohen, B.; Winn, M.I. (2007). *Market imperfections, opportunity and sustainable entrepreneurship*. *J. Bus. Ventur.* Page 22, 29–49
- Evans, J. St. B. T. (2008). *Dual-processing accounts of reasoning, judgment and social cognition*. *Annual Review of Psychology*, 59, 255–278. <https://doi.org/10.1146/annurev.psych.59.103006.093629>.
- Gallery N., Newton C., & Palm C., (2011). *Framework for Assessing Financial Literacy and Superannuation Investment Choice Decisions*. *The Australasian Accounting, Business and Finance Journal*. Vol 5 Issue 2. <https://ro.uow.edu.au/aabfj/vol5/iss2/2>.

Government of Kenya (2008) *Kenya Vision 2030: A Globally Competitive and Prosperous Kenya*. National Economic and Social Council (NESC), Nairobi. <http://vision2030.go.ke/wp-content/uploads/2018/09/Kenya-Vision-2030-Sector-Progress-Project-Updates-June-2018.pdf>.

Gupta K & Kaur J.,(2014) *A study of financial literacy among micro entrepreneurs in District Kangra*. *International Journal of Research in Business Management*. Vol 2 Issue 5. https://www.academia.edu/34965590/A_Study_Of_Financial_Literacy_Among_Micro_Entrepreneurs_in_District_Kangra.

Hilgert, M. A., Hogarth, J. M., and Beverly S.G. (2003). *Household financial management: The connection between knowledge and behavior*. *Federal Reserve Bulletin*, 89 (7), 309-322. <https://www.federalreserve.gov/pubs/bulletin/2003/0703lead.pdf>.

Hockerts K. and WüstenhagenR.,(2010). *Greening Goliaths versus emerging Davids - Theorizing about the role of incumbents and new entrants in sustainable entrepreneurship*.

Idowu, F. (2010). *Impact of Microfinance on Small and Medium-Sized Enterprises in Nigeria*. *Proceedings of the 7th International Conference on Innovation & Management*. <https://doi.org/10.4236/ojbm.2021.96153>.

Jianmu Ye & Kmmcb, Kulathunga. (2019). *How Does Financial Literacy Promote Sustainability in SMEs? A Developing Country Perspective*. *Sustainability*. 11. 2990. 10.3390/su11102990. <https://www.mdpi.com/2071-1050/11/10/2990>.

Kempson, E., Collard, S., and Moore, N. (2006). *Measuring financial capability: An exploratory study for the Financial Services Authority*. In *Consumer Financial Capability: Empowering European Consumers*. European Credit Research Institute (pp 39–77).

<http://www.bristol.ac.uk/geography/research/pfrc/themes/fincap/measuring-fincap.html>.

Kenya National Bureau of Statistics (2020). *Kenya Population and Housing Census. Vol 3- Distribution by Age and Sex*. <https://open.africa/dataset/9b94fe50-9d75-4b92-be00-6354c6e6cc88/resource/74e1e4d8-24d5-4e4f-8fba-cc29f1c85a8e/download/volume-iii-kphc-2019.pdf>.

- Kuratko D.F & Audretsch (2009) *Strategic Entrepreneurship: Exploring Different Perspectives of an Emerging Concept*. *Entrepreneurship Theory and Practice*. <https://doi.org/10.1111/j.1540-6520.2008.00278.x>.
- Lusardi, A & Mitchell O.S., (2010) *Financial Literacy and Planning: Implications for Retirement Well-Being*. *Wharton Pension Research Council Working Papers*. 211. https://repository.upenn.edu/prc_papers/211?utm_source=repository.upenn.edu%2Fprc_papers%2F211&utm_medium=PDF&utm_campaign=PDFCoverPages.
- Nicholls-Nixon C. L., Cooper A. C. and Woo C. Y. (2000). *Strategic experimentation: Understanding change and performance in new ventures*. *Journal of Business Venturing*, 15(5-6), pp.493-521. [https://doi.org/10.1016/S0883-9026\(98\)00018-4](https://doi.org/10.1016/S0883-9026(98)00018-4).
- Norris E.D., Kochar K., Suphaphiphat N., Ricka F., Tsounta E. (2015). *Causes and Consequences of Income Inequality: A Global Perspective*. *International Monetary Fund Working Paper*. <https://www.imf.org/external/pubs/ft/sdn/2015/sdn1513.pdf>.
- Pacheco D., Thomas, D., and Payne, D. (2010). *Escaping the Green Prison: Entrepreneurship and the Creation of Opportunities for Sustainable Development*. <http://dx.doi.org/10.1016/j.jbusvent.2009.07.006>.
- Shepherd D., and Patzelt H., (2011). *The New Field of Sustainable Entrepreneurship: Studying Entrepreneurial Action Linking “What Is to Be Sustained” With “What Is to Be Developed”*. <http://dx.doi.org/10.1111/j.1540-6520.2010.00426.x>.
- World Bank (2012). *World Development Report. Gender Equality and Development* World Bank: Washington. <https://doi.org/10.1596/978-0-8213-8810-5>.
- Zoltan J.A., Desai S., & Hessels J., (2008) *Entrepreneurship, Economic Development and Institutions*. *Small Business Economics*. <http://dx.doi.org/10.1007/s11187-008-9135-9>.